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In re the Application of

Michael NAHUM et al.

Application No.: 09/731,671

Examiner:

Filed:

December 8, 2000

Docket No.: 106539

For:

SYSTEM AND METHOD FOR HIGH-ACCURACY DISPLACEMENT

DETERMINATION IN A CORRELATION BASED POSITION TRANSDUCER

LETTER TO THE OFFICIAL DRAFTSPERSON

Director of the U.S. Patent and Trademark Office Washington, D.C. 20231

Sir:

Please substitute the attached 16 sheets of formal drawings depicting Figures 1-20 for the corresponding drawings filed with the application. The attached drawings have been corrected pursuant to the Notice to File Corrected Application Papers dated February 21, 2001.

Respectfully submitted,

enken J. Roe

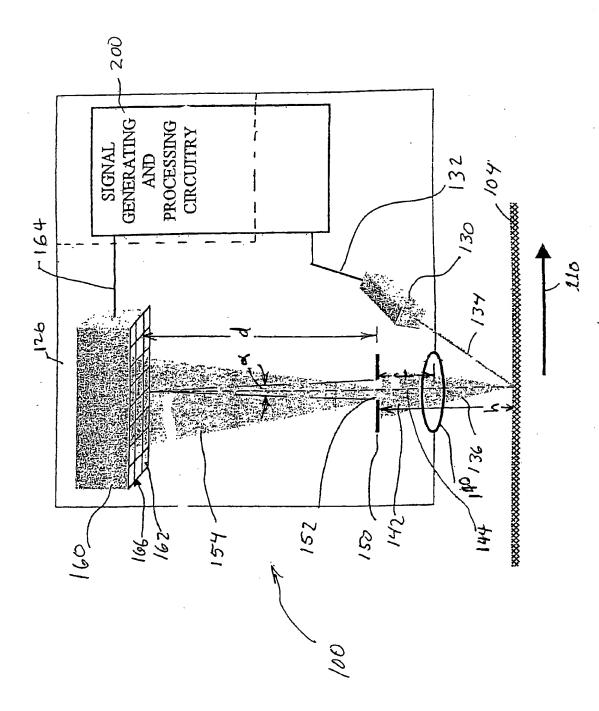
Registration No. 34,463

SJR/jam

Date: April 2, 2001

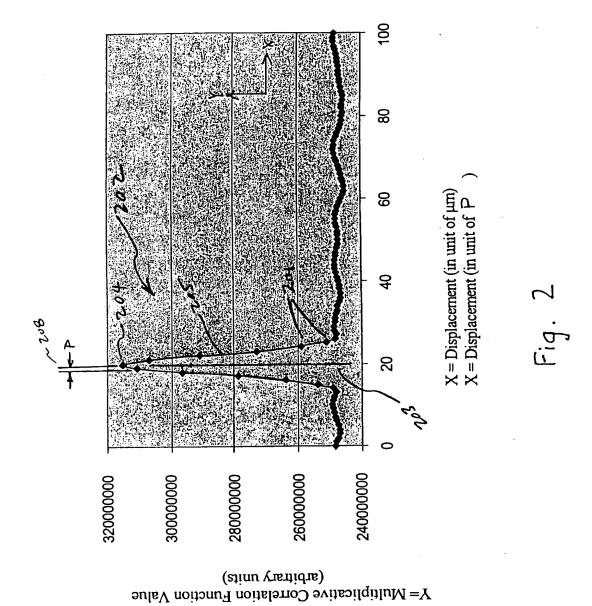
OLIFF & BERRIDGE, PLC P.O. Box 19928 Alexandria, Virginia 22320 Telephone: (703) 836-6400

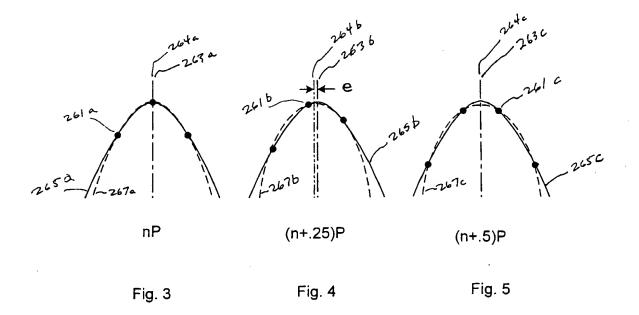
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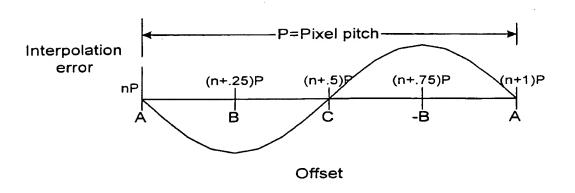
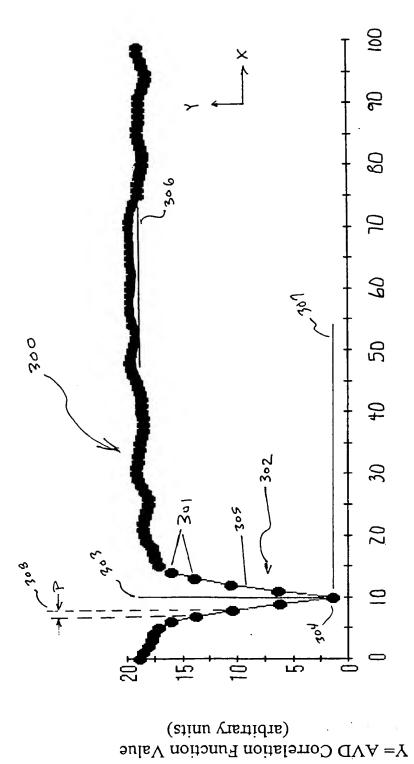


Fig. 6



X = Displacement (in unit of μ m) X = Displacement (in unit of μ)

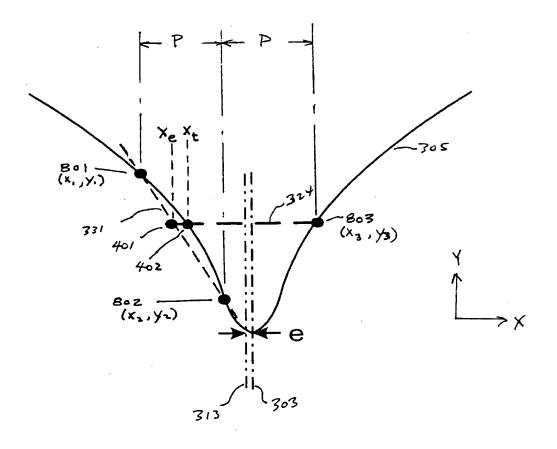


Fig. 8

Sinusoidal compensation

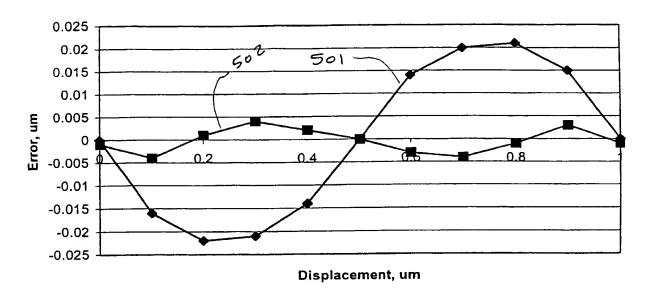


Fig. 9

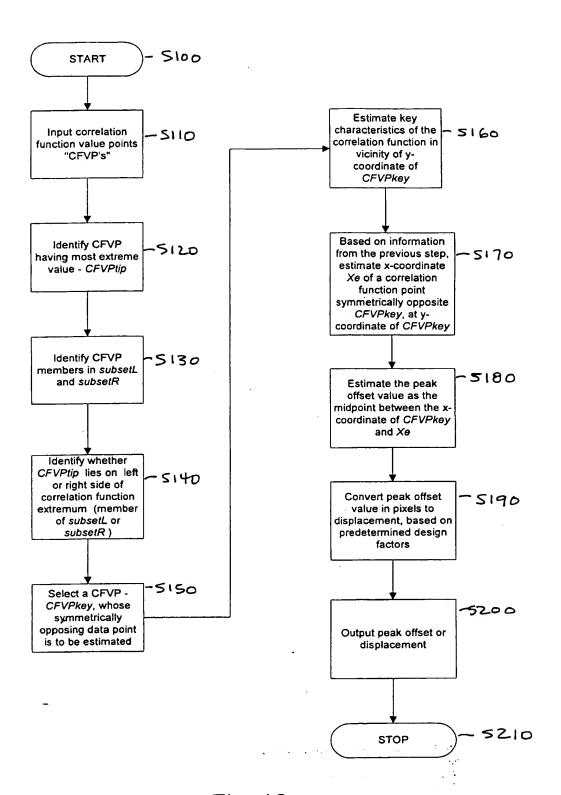


Fig. 10

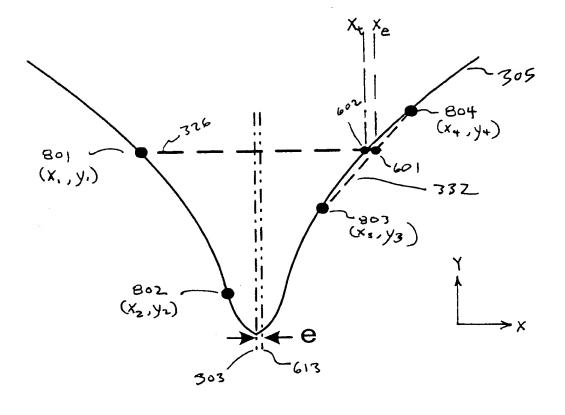
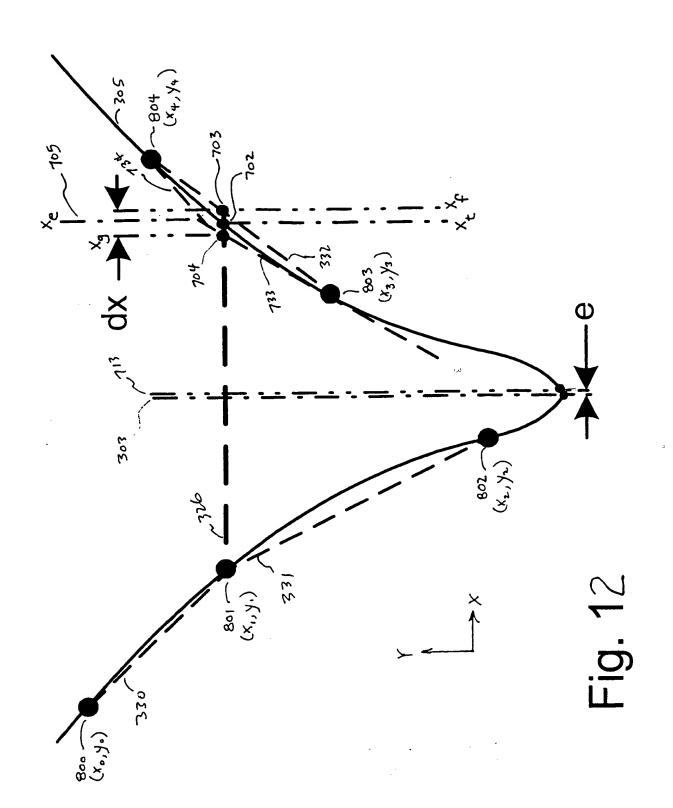


Fig. 11



Periodic errors, pinhole = 1.5 mm

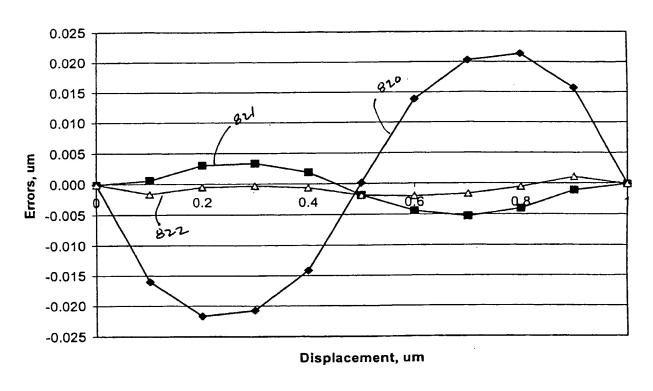
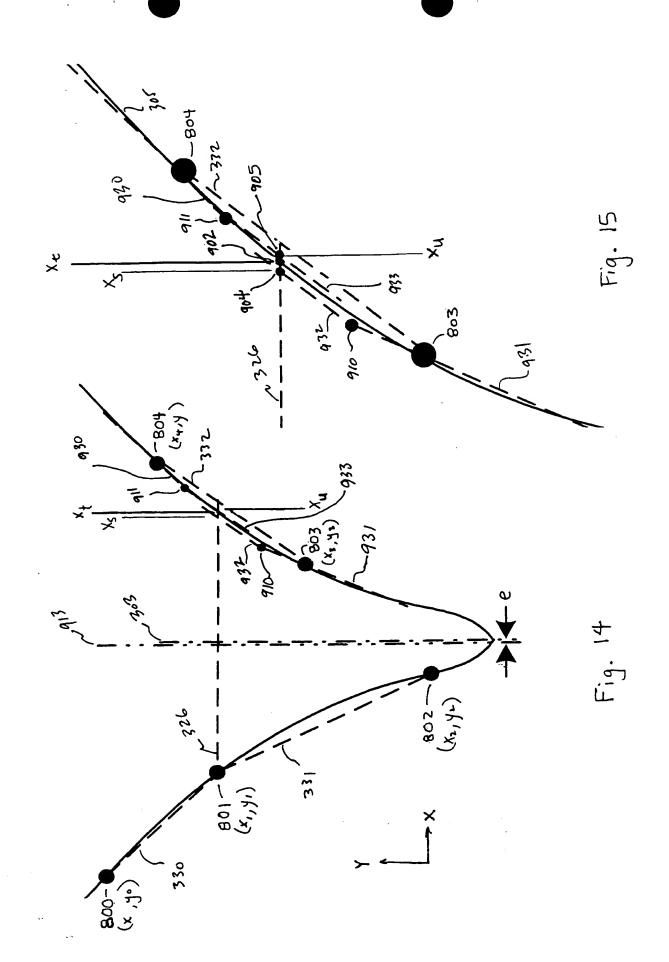
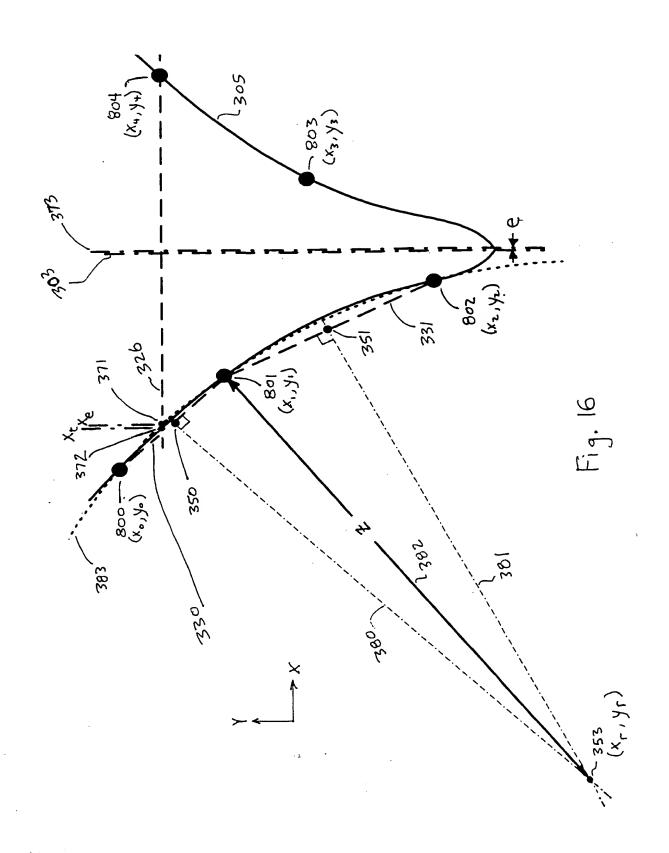


Fig. 13





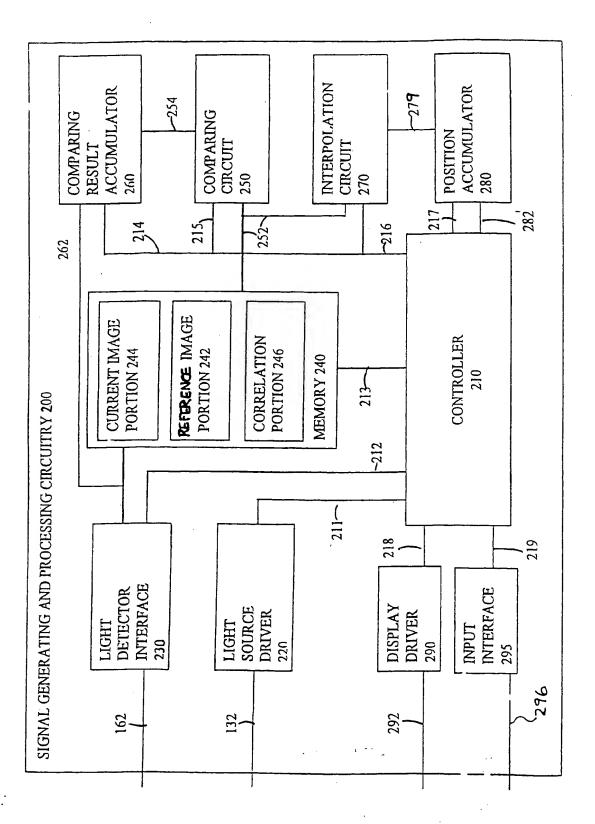


FIG. 17

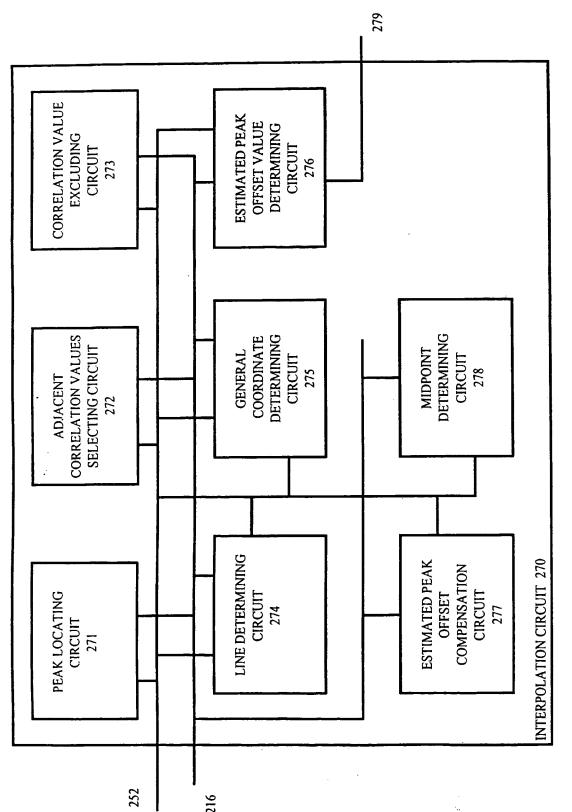


FIG. 18

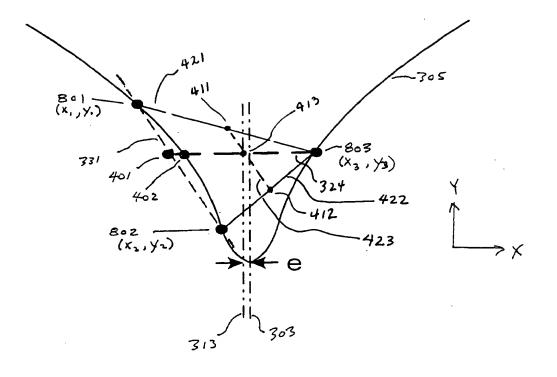


Fig. 19

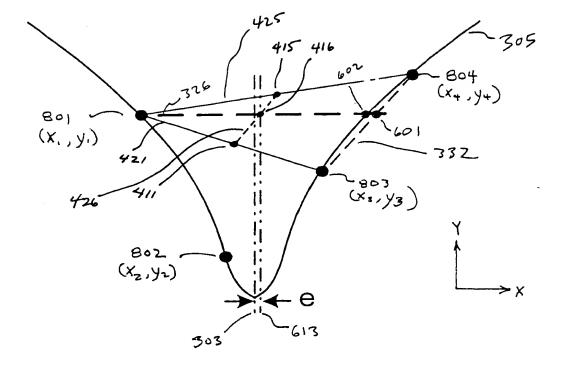


Fig. 20